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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,358	02/27/2004	Stefan Ansorge	Q79917	5912
23373 7590 03/17/2008				
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SUITE 800				
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EXAMINER				
HARPER, KEVIN C				
ART UNIT		PAPER NUMBER		
2616				
MAIL DATE		DELIVERY MODE		
03/17/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/787,358

**Applicant(s)**

ANSORGE ET AL.

**Examiner**

Kevin C. Harper

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

Applicant's arguments concerning the optical network, unrecognized flow label and determining new spare paths in Kano have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kano in view of Ravikanth.

Applicant's remaining arguments regarding Kano have been fully considered but they are not persuasive.

1. Applicant argued that Kano does not provide a path tag. However, the path tag is attached to packets in MPLS (paras. 4, 6, 11 and 34-35) and the path tag is used to provide a proper output port (fig. 2, IFout) based on forwarding information (fig. 1, items 11 and T) at each router.
2. Applicant argued that KANO does not provide an internal cross-connect. However, the routers (fig. 1) receive a packet on an input port and transmit the packet on an appropriate output port based on internal connections (item 12; para. 35).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the

contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 9 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kano (US 2002/0172150) in view of Ravikanth et al. (US 6,331,978).

1. Regarding claims 1, 3-4 and 14-15, Kano discloses a method of establishing a path through a transportation network comprising network elements (fig. 1, item 10). The method comprises the steps of assigning a traffic stream a tag (fig. 1), providing forwarding information (item 11; fig. 2), and routing the data stream according to the label (fig. 3; para. 44; note: selected output ports).

2. However, Kano does not disclose that the transmission signals are transported over physical connections and each transmission signal is divided into frames for a multiplex hierarchy. Ravikanth discloses transmitting a data stream (figs. 2-3; note: MPLS) over physical connections that have frames of the same length and being structured according to a multiplex hierarchy (col. 5, lines 1-7; col. 6, lines 52-54; note: MPLS over SONET). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to transport packets over frames in the invention of Kano in order to transmit data over legacy networks (Ravikanth, col. 1, lines 20-23; col. 2, lines 30-35 and 52-63).

3. Regarding claims 2 and 9, in Kano the method further comprises detecting a failure, and determining a preprogrammed cross-connection based on the tag to restore the path (fig. 1; fig. 6; fig. 8, step S22; fig. 9).

4. Regarding claim 5, in Kano a new output label is given (fig. 2, note: Lout differs from Lin).

Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kano in view of Ravikanth as applied to claim 9 above, and in further view of Agrawal et al. (US 2004/0105383).

5. Regarding claims 10 and 13, Kano in view of Ravikanth does not disclose determining new restoration paths. Agrawal discloses determining new restoration paths after a restoration path is put in use (para. 55). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to create new restoration paths in the invention of Kano in view of Ravikanth in order to provide a restoration for the current active path (Agrawal, para. 55).

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kano (US 2002/0172150) in view of Ravikanth et al. (US 6,331,978) and Ohba et al. (US 2002/0176370).

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kano in view of Ravikanth and Agrawal as applied to claim 10 above, and in further view of Ohba et al. (US 2002/0176370).

6. Regarding claims 6 and 11-12, Kano in view of Ravikanth discloses the system and method as described in the rejection of claim 1 above. Further, the method of Kano is performed by a network element or management facility (fig. 1) that comprises ports (para. 44), a low-level controller (item 10) and memory (item 11), a monitor (item 14), and a cross connect matrix (item 12).

7. However, Kano in view of Ravikanth does not disclose detecting an unknown label and routing determining an appropriate output port for the associated data. Ohba discloses detecting an unknown label (para. 210; fig. 14, step S2) and routing the data to an appropriate output port (step S13; para. 223; paras. 212-213). Therefore, it would have been obvious to one skilled in the art at

the time the invention was made to route an unknown label in the invention of Kano in view of Ravikanth in order to establish new paths in the network (Ohba, para. 223).

8. Regarding claims 7-8, in Kano the element comprises a high-level controller (item 13) for determining resources (paras. 35-36).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached at 571-272-2092. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kevin C. Harper/

Primary Examiner, Art Unit 2616

March 3, 2008